



Department of Defense Modeling and Simulation Conference

DoD M&S Project: Standardized Documentation for Verification, Validation, and Accreditation

**Thursday, 13 March 2008
2:30-3:00 p.m.**

**Presented by
Project Management Team (PMT)**

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Outline

- Project Introduction
- Project Organization
- Concept of Operations
- Updates across major areas
- POA&M
- Summary
- Points of Contact
- Exhibit Hall



DoD M&S Project

- Sponsor: Department of Defense (DoD)
M&S Steering Committee
(M&S SC)
- Oversight: Acquisition Community Lead
- Project title: Standardized Documentation
for VV&A



DoD Acquisition M&S Master Plan

Acquisition Objectives & Actions

- **OBJECTIVES**

- Obj 2: Enhance the technical framework for M&S
- Obj 4: Improve M&S use

- **ACTIONS**

- Establish a standard template of key characteristics (metadata) to describe reusable M&S resources
- Enhance the means (e.g., directory service, registries, bulletin boards) to discover the existence of reusable resources required for M&S and contact information
- Require standardized documentation of VV&A DoD-wide

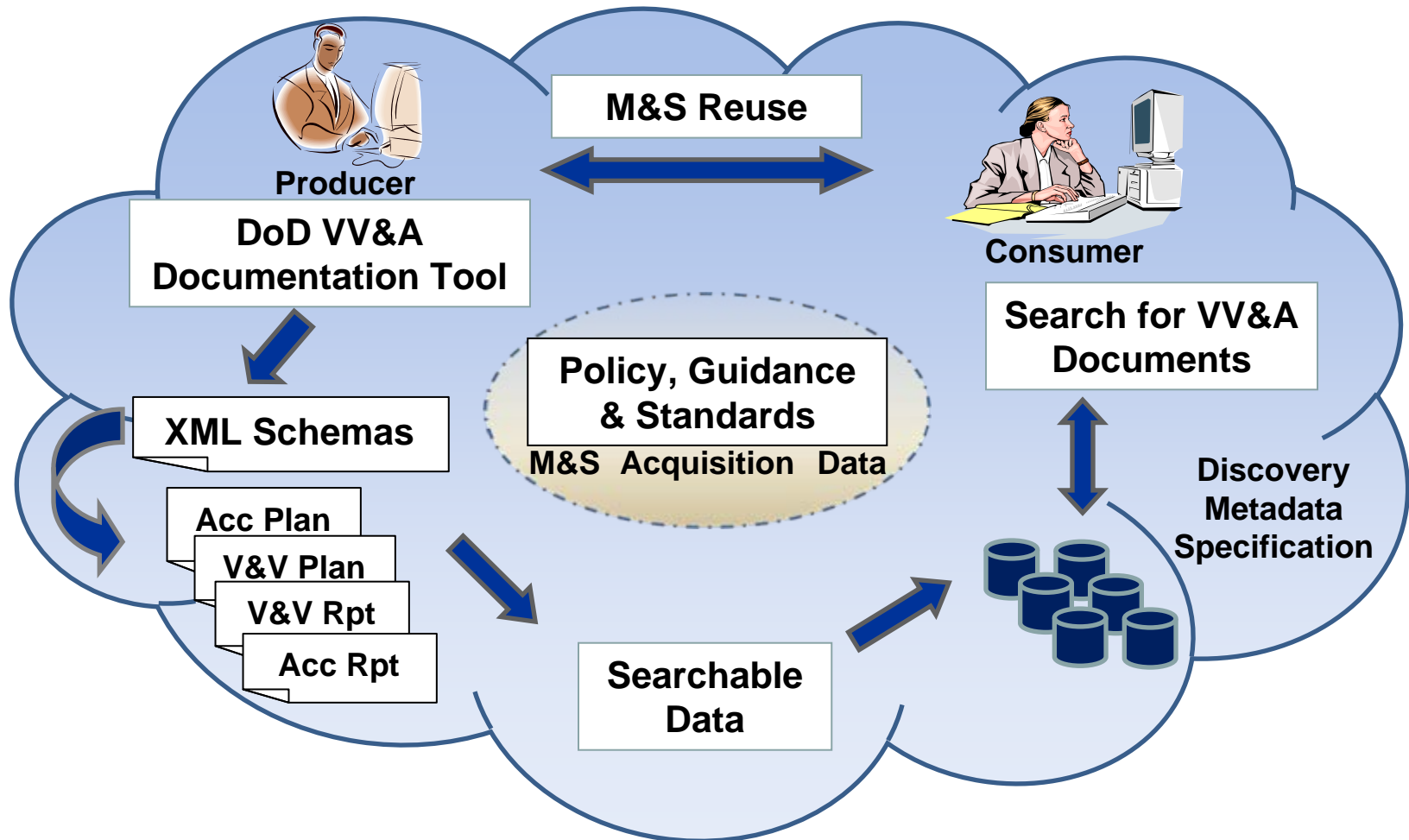


Project Scope

- Three major tasks and associated deliverables:
 - recommend updates to associated policy, guidance, and standards documents
 - develop VV&A XML schemas and VV&A ontology for M&S
 - produce and field DoD VV&A Documentation Tool (DVDT)

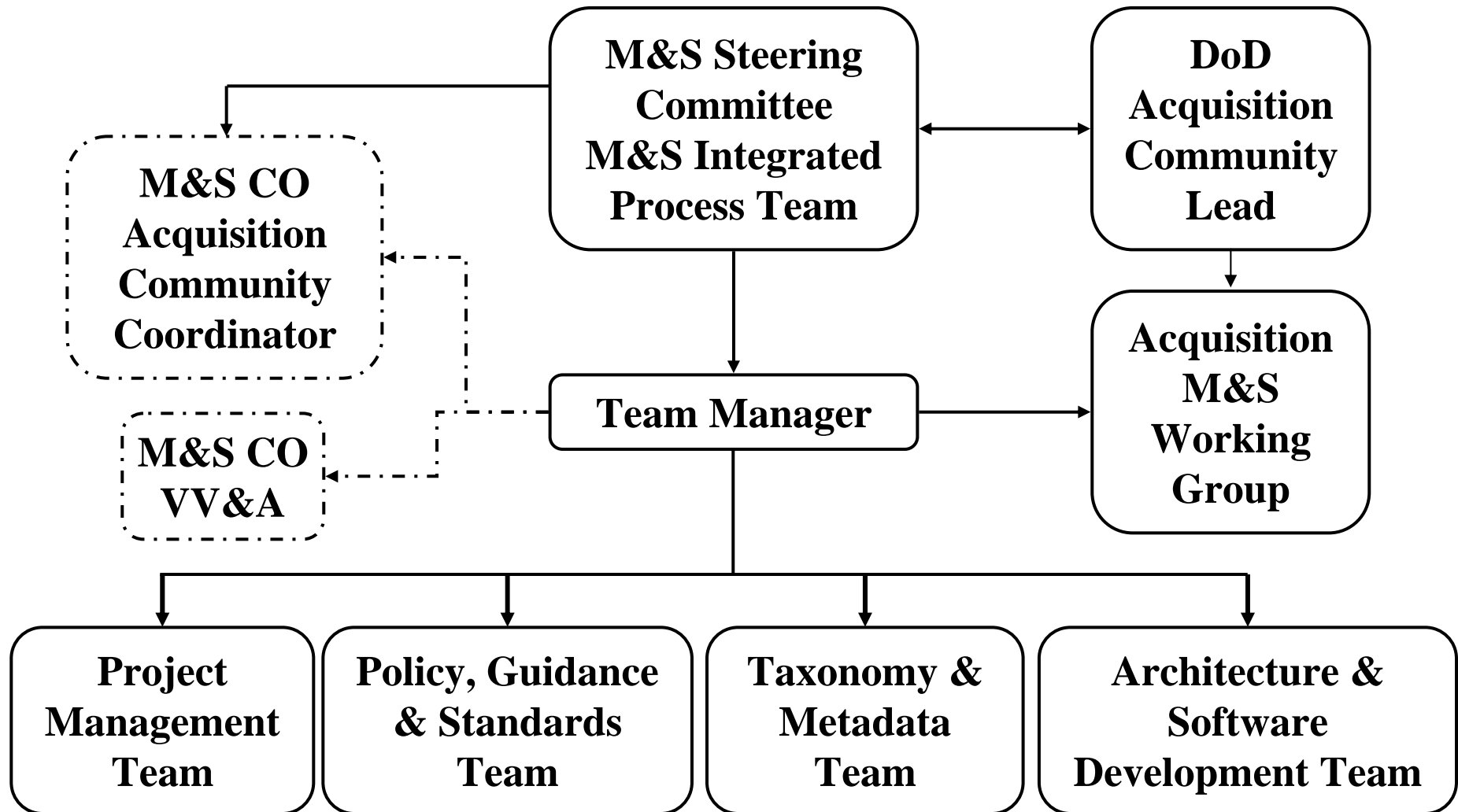


Concept of Operations



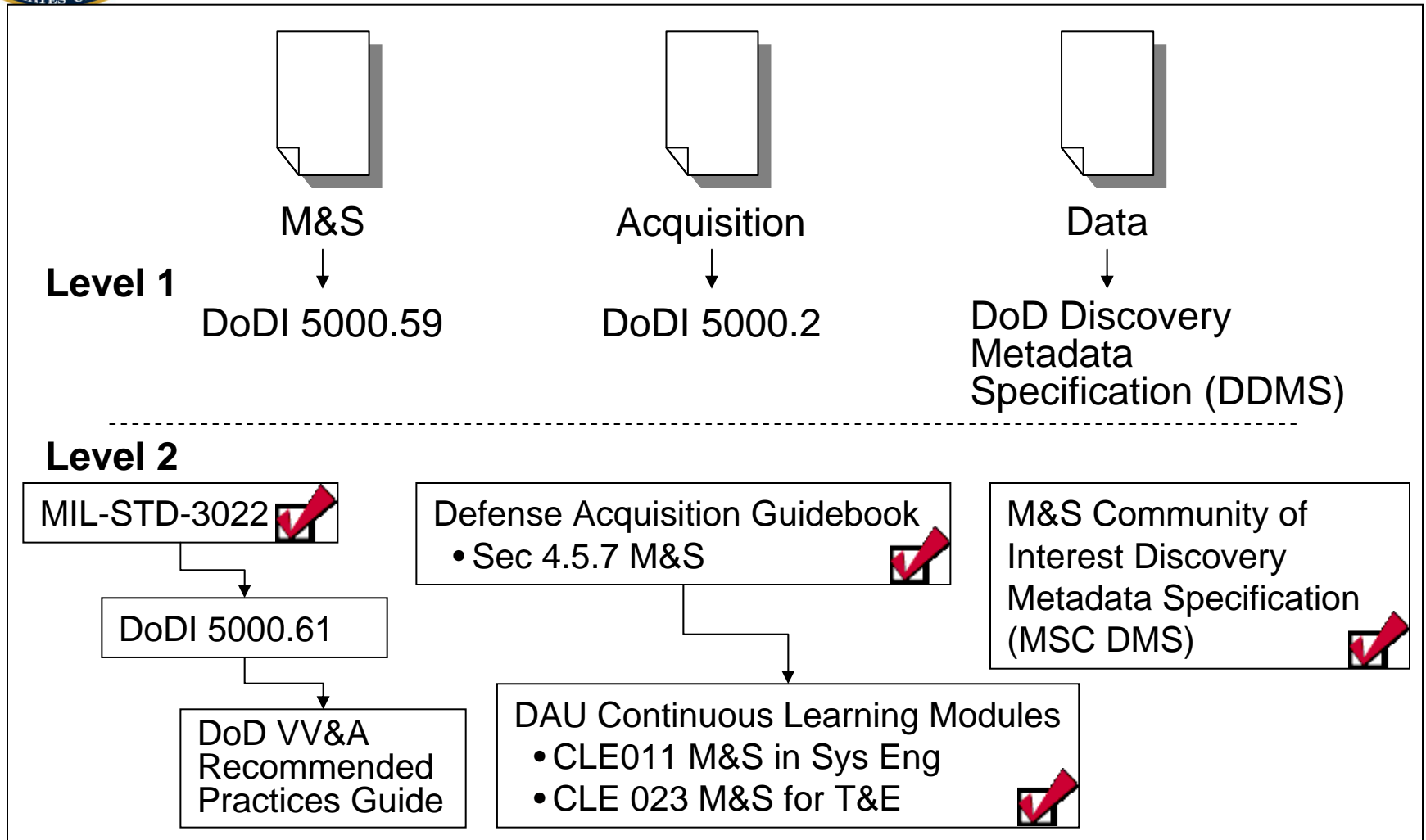


Project Organization





Policy, Guidance & Standards



***VV&A information is important not only for the decision at hand,
but for future decisions to reuse M&S***



MIL-STD-3022

- **2005-2006:** DoD-sponsored Tri-Service VV&A Templates Tiger Team developed templates for four core VV&A documents
 - Accreditation Plan
 - V&V Plan
 - V&V Report
 - Accreditation Report
- **2007:** Processed through DoD M&S management system and Defense Standardization Program
- **2008:** Approved as DoD Standard Practice
 - Available from the Acquisition Streamlining and Standardization Information System (ASSIST)
 - <http://assist.daps.dla.mil/>



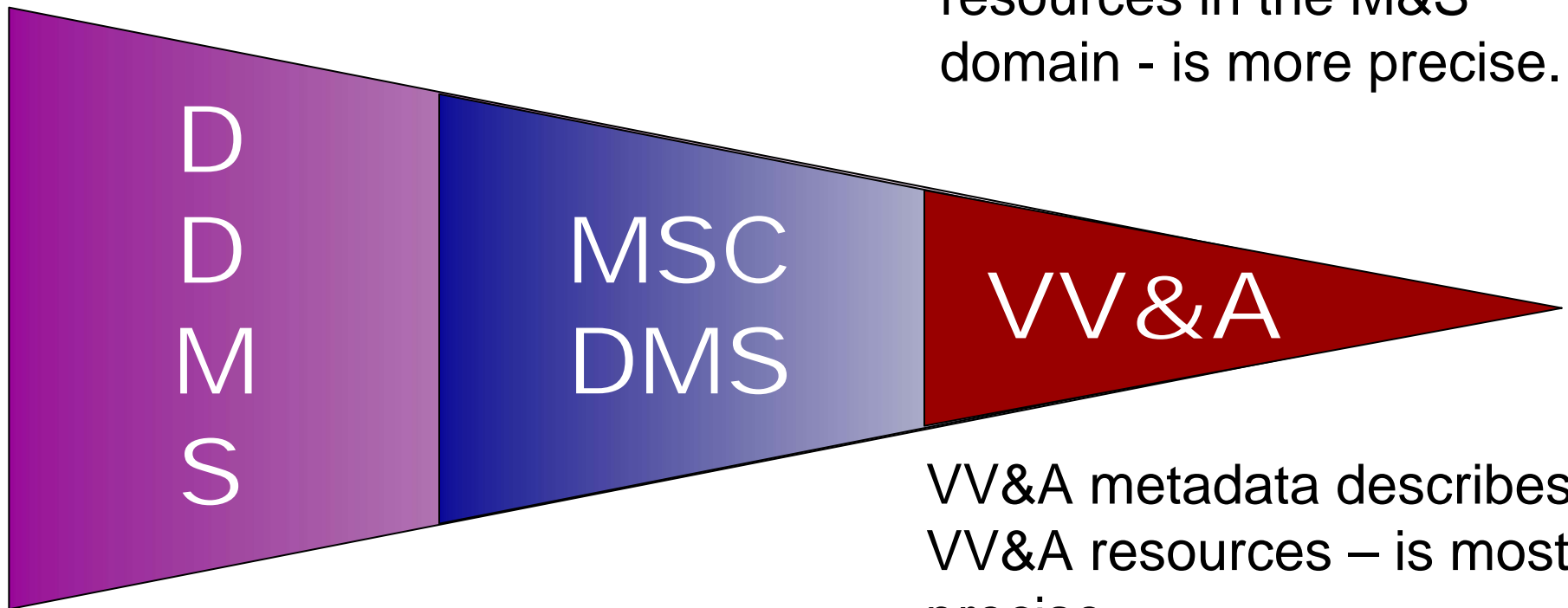
DVDT automates standard templates enabling sharing of VV&A information across Global Information Grid (GIG) enterprise



Taxonomy & Metadata

DDMS describes DoD resources - is very broad.

MSC DMS provides more detail to describe resources in the M&S domain - is more precise.



VV&A metadata describes VV&A resources – is most precise.

DDMS: DoD Discovery Metadata Specification

MSC DMS: M&S Community of Interest Discovery Metadata Specification



DoD Metadata Registry

**VV&A
Project
Metadata
XML
Schema**

**VV&A
Document
Metadata
XML
Schema**

**VV&A
Document
Common
Elements
XML
Schema**

**Accreditation
Plan
XML
Schema**

**Accreditation
Report
XML
Schema**

**V&V
Plan
XML
Schema**

**V&V
Report
XML
Schema**

DoD Metadata Registry and metadata registration process established to collect, store, and disseminate structural metadata information resources, e.g.:

- schemas
- data elements
- attributes
- document type definitions
- style-sheets
- data structures


The project's XML products will be registered and available for use by industry and government.




<http://metadata.dod.mil>



DVDT Portal



VV&A Documentation Tool



VV&A ASSISTANCE

- M&S Interview
- DoD VV&A RPG
- MIL-STD-3022
- Data Item Descriptions
- Policy
- Standards

TOOL OPTIONS

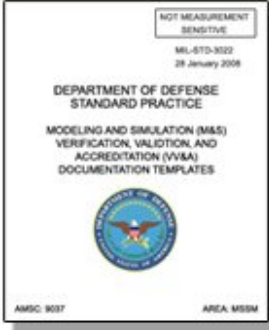
- Register
- Login
- Help
- Feedback


Welcome to the DoD VV&A Documentation Tool (DVDT)

The DoD VV&A Documentation Tool (DVDT) addresses the need to capture VV&A information in a consistent format with consistent content. The purpose for the DVDT is to support the various DoD- and Service-level Communities by producing standardized VV&A documentation and meeting net-centric architecture requirements for sharing, discovering, and retrieving VV&A information within the Global Information Grid (GIG) enterprise.


The DVDT is the technology that automates the standard DoD VV&A documentation templates formalized in the DoD Standard Practice Modeling and Simulation (M&S) Verification, Validation, and Accreditation (VV&A) Documentation Templates (MIL-STD-3022).

Automation of the templates saves users time by expediting the VV&A documentation production process and ensuring standardization of content and format across DoD and the Military Departments.





DoD M&S Tool Suite



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Notional Requirements Traceability

MILSTD 3022 Guide

	Accreditation Plan	V&V Plan	V&V Report	Accreditation Report
#	M&S Requirement	Planned V&V Task/ Acceptability Criterion	V&V Task/ Analysis	Accreditation Assessment
1	REQ#- 01	1.1 1.2 1.n	1.1 1.2 1.n	1.1 1.2 1.n
2		2.1 2.n	2.1 2.n	2.1 2.n
n		n.n	n.n	n.n

DVDT Tool Bar

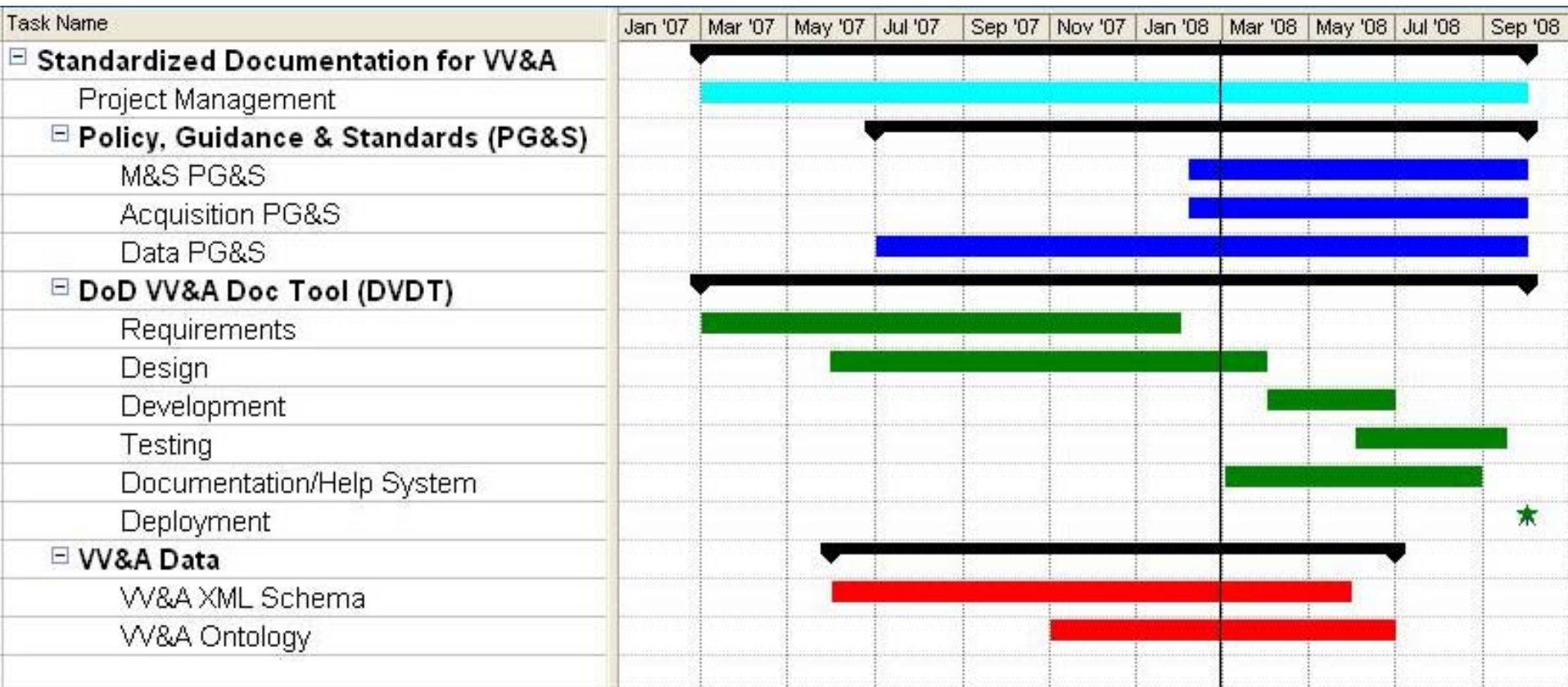
The Requirements Traceability Matrix maintains the link between V&V tasks, and acceptable criteria to the M&S requirement.

Short field description

Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR English (U.S.)



Current Plan of Actions and Milestones





Summary

- Provided information about the DoD M&S Project, “*Standardized Documentation for VV&A*”
- Highlighted four main areas of the project
 - Initial policy, guidance, and standards recommendations were made to the DoD Acquisition Community Lead through the AMSWG.
 - Various XML description documents began coordination through the GIG M&S COI.
 - On schedule to release the DVDT beta production version in Spring 2008.



Points of Contact

For more information,
to become a DVDT beta tester, or
to use the DVDT to support a VV&A project,
contact any one of the authors below.

Kevin Charlow

David H. Broyles

Richard Daehler-Wilking, Ph.D.

Space and Naval Warfare Systems

Center Charleston

P.O. Box 190022

North Charleston, SC 29419

kevin.charlow@navy.mil

843-218-5372, DSN 588

david.h.broyles@navy.mil

843-218-4834, DSN 588

r.daehler-wilking@navy.mil

843-218-4768, DSN 588

Curtis Blais

MOVES Institute

Naval Postgraduate School

700 Dyer Road

Monterey, CA 93943-5001

831-656-3215, DSN 756-3215

clblais@nps.edu

Marcy Stutzman

Northrop Grumman Corporation

3422 Londonleaf Lane

Laurel, MD 20724

301-317-9698

marcy.stutzman@ngc.com



Acquisition Community Display

For more information,
talk to my

Project Management Team
at the Acquisition Community's display
in the Exhibit Hall
(Tuesday-Thursday).

Be sure to pick up a flyer to take with you.



Acronyms

AMSWG	Acquisition M&S Working Group
ASSIST	Acquisition Streamlining and Standardization Information System (http://assist.daps.dla.mil/)
DDMS	DoD Discovery Metadata Specification
DoD	Department of Defense
DVDT	DoD VV&A Documentation Tool
GIG	Global Information Grid
IC-IMS	Intelligence Community-Information Security Marking
M&S	Modeling and Simulation, model(s) and simulation(s)
M&S CO	M&S Coordination Office
M&S SC	M&S Steering Committee
MSC DMS	M&S Community of Interest Discovery Metadata Specification
PMT	Project Management Team
POA&M	Plan of Actions and Milestones
VV&A	Verification, Validation, and Accreditation
XML	Extensible Markup Language